CBO TESTIMONY

Statement of Dan L. Crippen Director

Federal Subsidies for the Housing GSEs

before the
Subcommittee on Capital Markets, Insurance,
and Government Sponsored Enterprises
Committee on Financial Services
U.S. House of Representatives

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CONGRESSIONAL BUDGET OFFICE SECOND AND D STREETS, S.W. WASHINGTON, D.C. 20515

Mr. Chairman and Members of the Subcommittee, I am pleased to present the Congressional Budget Office's latest estimates of the federal subsidy provided to the housing government-sponsored enterprises (GSEs). As you requested, I will also summarize CBO's estimates of the portion of the subsidy that is passed through to borrowers. And I will describe some of the methods that CBO used to arrive at its estimates to make clear the appropriate interpretation—the strengths and limitations—of the analysis.

The federal subsidy to GSEs is unusual in that it is not explicitly appropriated by the Congress in legislation nor does it appear in the budget as outlays. In fact, as Alan Greenspan has noted, the subsidy is largely determined by the GSEs' own actions. Nonetheless, it is real. It represents costs to the American public and is highly valued by recipients.

Mr. Chairman, my testimony and the CBO study on which it is based, *Federal Subsidies and the Housing GSEs*, makes two major points:

- ! The housing GSEs receive a substantial federal subsidy as a result of their special status, estimated to be \$13.6 billion in 2000.
- ! They pass through some but not all of that subsidy to mortgage borrowers, about \$7.0 billion in 2000.

THE FUNCTION OF AND SUBSIDY TO THE HOUSING GSEs

Fannie Mae, Freddie Mac, and the Federal Home Loan Banks (FHLBs)—collectively the housing GSEs—were created to provide liquidity and stability to the home mortgage market, thereby increasing the flow of funds available to mortgage borrowers. The oldest of these enterprises, the FHLBs, were chartered in 1932 to provide short-term loans (called advances) to thrift institutions to stabilize mortgage lending in local credit markets. Fannie Mae was originally created as a wholly owned government corporation in 1938 to buy mortgages, primarily from mortgage bankers, and hold them in its portfolio. Although Fannie Mae was converted into a GSE in 1968, it continued the practice of issuing debt and buying and holding mortgages. Freddie Mac, created in 1970 as part of the Federal Home Loan Bank System, bought mortgages primarily from thrifts. Rather than hold the mortgages in its portfolio, Freddie Mac pooled them, guaranteed the credit risk, and sold interests in the pools to investors—creating mortgage-backed securities.

The debt and mortgage-backed securities of GSEs are more valuable to investors than similar private securities because of the perception of a government guarantee and because of other advantages conferred by statute. That added value is the primary means by which the federal government conveys a subsidy to the GSEs. Because of competitive forces, a large part of the subsidy passes through the GSEs and other financial intermediaries to the intended beneficiaries—primarily mortgage borrowers but also other borrowers of FHLB member institutions. However, the shareholders and stakeholders of Fannie Mae and Freddie Mac are able to retain a portion of the subsidy because GSE status provides a competitive advantage over other financial institutions. Similarly, to the extent that competition is not perfect, stakeholders in the FHLBs and member institutions retain a portion of the subsidy to the banks.

THE SIZE AND COMPOSITION OF THE SUBSIDY

As shown in Table 1, CBO estimates that the total federal subsidy provided through and to the housing GSEs grew from \$6.8 billion in 1995 to approximately \$15.6 billion in 1999. The total dropped slightly, to \$13.6 billion in 2000, reflecting a slowdown in the growth of the mortgage market and fewer opportunities for profitable intermediation by the GSEs.

The single largest component of the subsidy is the reduction in borrowing costs from the implicit federal guarantee of debt issued by the GSEs. By CBO's estimate, GSEs have a borrowing advantage of 41 cents per \$100 of debt issued (or 41 basis points) because of their special status. During 2000, the housing GSEs increased their outstanding debt by \$227 billion (to more than \$1.6 trillion) and in the process locked in reduced debt-servicing costs with a present value of \$8.8 billion. Similarly, Fannie Mae and Freddie Mac have an advantage of 30 basis points on mortgage-backed securities, CBO estimates. During 2000, they increased their guarantees of those securities by \$66 billion (to \$1.3 trillion). Fannie Mae's and Freddie Mac's GSE status added \$3.6 billion to the value of those mortgage-backed securities. Finally, the value of the tax and regulatory exemptions for the housing GSEs, which CBO did not include in its 1996 estimate, has risen significantly, to \$1.2 billion in 2000.1

^{1.} Congressional Budget Office, Assessing the Public Costs and Benefits of Fannie Mae and Freddie Mac (May 1996).

Table 1. Federal Subsidies to the Housing GSEs, 1995-2000 (In billions of dollars)

	1995	1996	1997	1998	1999	2000
Subsidies by GSE and by Source						
Fannie Mae						
Debt	1.7	1.5	1.8	3.2	3.3	3.6
Mortgage-backed securities	1.5	1.7	1.7	2.3	2.1	1.9
Tax and regulatory exemptions	0.3	0.4	0.4	0.5	0.6	0.6
Freddie Mac						
Debt	0.8	1.1	0.8	3.3	2.4	2.4
Mortgage-backed securities	1.0	1.3	1.1	1.1	2.1	1.8
Tax and regulatory exemptions	0.2	0.2	0.2	0.3	0.4	0.4
FHLBs						
Debt	1.2	1.1	2.0	2.6	4.5	2.8
Tax and regulatory exemptions	0.2	0.2	0.2	0.2	0.2	0.2
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Total	6.8	7.4	8.1	13.5	15.6	13.6
Subsidies by Recipient						
Conforming mortgage borrowers ^a	3.7	4.1	4.0	7.0	7.4	7.0
Fannie Mae and Freddie Mac	1.8	2.2	2.1	3.9	3.9	3.9
FHLB stakeholders ^b	1.3	1.1	2.0	2.6	4.3	2.7
The state of the s	1.0	<u></u>	2.0		1.0	
Total	6.8	7.4	8.1	13.5	15.6	13.6

SOURCE: Congressional Budget Office.

NOTES: The subsidies to GSE debt and mortgage-backed securities are present values. The annual savings from tax and regulatory exemptions are for the current year only.

Numbers may not add up to totals because of rounding.

The total subsidy is distributed roughly in proportion to the relative size of the three enterprises. In 2000, about 45 percent went to Fannie Mae, 33 percent to Freddie Mac, and the remaining 22 percent to the FHLBs. Those shares are only slightly changed from 1995, when Fannie Mae's share is estimated to have been 50 percent, Freddie Mac's 30 percent, and the FHLBs' 20 percent.

The capitalized subsidy in any year depends on the growth rate of the GSEs' borrowing and guarantees of mortgage-backed securities in that year. Figure 1 shows

a. Conforming mortgages are loans that are eligible for purchase by Fannie Mae and Freddie Mac with an original principal amount no greater than a stated ceiling, which is currently \$275,000 for single-family mortgages.

The estimates assume that conforming mortgages financed by FHLB members were a constant share of members' portfolios from 1995 to 2000.

how the total subsidy would evolve in the next 10 years under three different scenarios for the growth of debt and mortgage-backed securities. Under the high-growth scenario (growth of GDP plus 2 percent), the total subsidy would exceed \$28 billion in 2011.

CBO estimates that a little more than half (\$7.0 billion) of the total subsidy in 2000 passed through to conforming mortgage borrowers via interest rates that are estimated to be 25 basis points lower because of the subsidy. About 30 percent of the total subsidy was retained by Fannie Mae and Freddie Mac, and the remaining 20 percent was disbursed to customers and shareholders of member institutions of the Federal Home Loan Bank System.

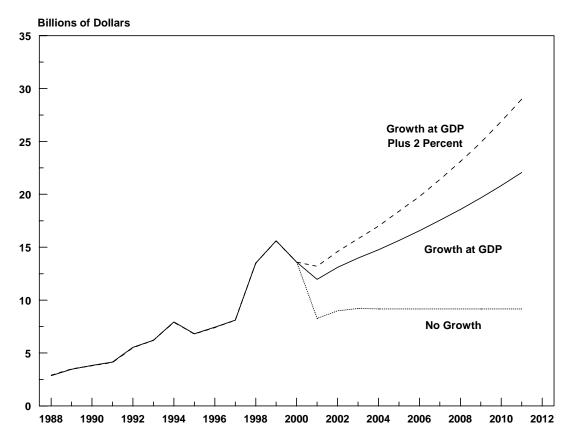
CBO assumes that, because of competitive pressures, the benefit passed through to conforming mortgage borrowers, 25 basis points, is the same whether a mortgage is purchased by a GSE or packaged into a mortgage-backed security and guaranteed by a GSE. However, the estimated retained subsidy is 5 basis points on mortgage-backed securities and 16 basis points on debt issues. The lower retained benefit on mortgage-backed securities can be explained at least in part by the fact that the risk assumed by the GSEs is considerably less than on mortgages that they hold in their portfolios. The higher subsidy on debt than on mortgage-backed securities may help to explain Fannie Mae's and Freddie Mac's increased use of debt relative to mortgage-backed securities in recent years.

CBO'S ESTIMATION PROCEDURE

The total federal subsidy to the housing GSEs is the sum of two major components the value added to GSE debt and guaranteed mortgage-backed securities in the capital markets and the costs the GSEs avoid as a result of regulatory and tax exemptions. The advantages in capital markets arise from an implied federal guarantee, which is inferred by investors from the special provisions in law benefiting the GSEs.

Figure 1.

Total Subsidies to the Housing GSEs Under Three Scenarios, 1988-2011



SOURCE: Congressional Budget Office.

Estimating the value of the GSEs' advantages in the capital markets involves several steps. First, the yield on GSE debt is compared with the higher yield on comparable issues of other financial institutions.² Second, that difference is multiplied by the amount of new debt issued in the current year—generating the current year's subsidy. Next, the yield advantage is multiplied by the amount of that debt that is expected to remain outstanding in future years. The flow of estimated future subsidies is converted to a present value using a discount rate equal to the GSEs' borrowing cost to obtain the current year's total subsidy. This calculation produces a total subsidy

^{2.} The comparison is based on debt issues by 70 of the largest banking-sector firms rated either A or AA during the period 1995 to 1999 and issues by the GSEs over that same period.

on debt issued in 2000 of \$8.8 billion. An analogous procedure yields a total subsidy on mortgage-backed securities of \$3.6 billion in 2000.

The capitalized subsidy recognizes benefits when securities are issued and mortgages are purchased or securitized. That measure of the incremental benefit provided to new securities issued and mortgages financed is consistent with the objective of generally accepted federal accounting principles and budgetary practices. But it represents a change in method from previous estimates, including CBO's 1996 estimate.

The principal advantage of the new approach is that it ties the measure of the subsidy to the GSEs' current activities rather than to past transactions. For example, the current measure of the subsidy rose sharply in 1998 and 1999, which were years of rapid growth in the volume of securities issued by Fannie Mae, Freddie Mac, and the FHLBs, but declined in 2000, when their rate of growth fell back to the pre-1998 pace.

The second component of the subsidy, lower taxes and regulatory exemptions, is straightforward: CBO estimates the taxes, the Security and Exchange Commission's fees, and rating fees that the GSEs would pay each year were it not for their special status. That component is not capitalized. Rather, because its value is determined largely by each year's activity, it is reported on an annual cash flow basis.

THE BENEFITS TO BORROWERS

CBO has also estimated the division of the subsidy among the major beneficiaries, including the portion of the subsidy that reaches mortgage borrowers in the form of lower interest rates. On the basis of the estimated differential between rates for jumbo mortgages (which in 2001 are for amounts above \$275,000) and conforming mortgages (which are for \$275,000 and below and are eligible for purchase by Fannie Mae and Freddie Mac) and an adjustment for the FHLBs' influence on the rates for jumbo mortgages, CBO estimates that interest rates on mortgages are reduced by one-quarter of one percentage point (0.25 percentage points, or 25 basis points) as a result of the federal subsidy. A small subsidy (3 basis points) is provided to jumbo mortgages via the FHLBs. They pass a subsidy through to their members, who in turn pass it through to their customers, including borrowers of jumbo mortgages. The interest rate reduction on jumbo loans is relatively small because the subsidy is spread across the total business of FHLB members, and jumbo loans make up a small portion of that business.

The estimated savings to conforming mortgage borrowers are also capitalized because the benefit of lower mortgage rates lasts for the life of the mortgage. About \$7.0 billion of the total subsidy of \$13.6 billion was passed through to conforming mortgage borrowers by the housing GSEs in 2000. Of that \$7.0 billion, the subsidy to borrowers from mortgages financed by Fannie Mae and Freddie Mac was \$6.7 billion. Because conforming mortgages are Fannie Mae's and Freddie Mac's only major line of business, CBO assumes that the portion of the subsidy not passed through is retained by shareholders and other stakeholders. Subtracting the amount of subsidy passed through by Fannie Mae and Freddie Mac from their total subsidy (\$10.6 billion minus \$6.7 billion) leaves \$3.9 billion (or about 37 percent) as the amount they retained in 2000.

Determining the disposition of the subsidy to the FHLBs is also complicated because their member banks engage in a variety of lending activities. CBO estimates that their conforming mortgage borrowers received \$0.3 billion out of the \$3.0 billion total subsidy to the banks, assuming that the reduction in rates passed through is the same as for loans purchased by Fannie Mae or Freddie Mac and acknowledging that about 15 percent of member banks' assets are conforming mortgages. CBO assumes that the balance reduces borrowing rates on other types of loans and accrues to other FHLB stakeholders.

UNCERTAINTY AND JUDGMENT

As with all such estimates, data limitations and the complexity of the underlying processes imply that significant uncertainty attaches to all of CBO's point estimates. In fact, the sensitivity analysis included in CBO's report being released today shows that changing some of the individual parameters could significantly raise or lower the subsidy estimates. In assessing CBO's estimates, therefore, it is important to note that where missing or insufficient data necessitate judgments about parameter values, those judgments have been balanced and are not consistently in one direction or the other.

Several of CBO's assumptions may have reduced the size of the estimated subsidy. Faced with uncertainty over the duration of the benefit from the implied guarantee of GSE securities, CBO chose a short horizon rather than a long one. CBO also used a risk-adjusted discount rate, rather than a Treasury rate, to convert savings into present values. Those judgments reduced the estimated subsidy compared with the results from using an equally reasonable but longer horizon and a risk-free discount rate. Without knowledge of the ability of the GSEs to exploit short-term variations

in their borrowing advantage, CBO attributed no benefit to their ability to adjust their security sales and mortgage purchases to changes in yield spreads. Similarly, without data for measuring the value of the GSEs' ability to issue callable debt and enter into derivatives transactions, CBO assigned a value of zero to this benefit of federal backing. Again, those decisions tended to reduce the estimated subsidy to the housing GSEs.

Other judgments, necessitated by a lack of data or intractable complexity, tended to raise the estimated subsidy. For example, the fact that there are so few financial institutions that have a financial rating that is comparable to the housing GSEs' led CBO to base the GSE debt funding advantage on a sample of non-GSE securities more heavily weighted toward A-rated rather than AA-rated issues.³ That decision raised the value of the estimated subsidy compared with the value CBO would have obtained if it had restricted its sample to the handful of AA-rated securities. Furthermore, notwithstanding the claims of Fannie Mae and Freddie Mac that some of their funding advantage is due to their operating efficiency rather than to their GSE status, lacking evidence of the extent of this effect CBO attributed none of their borrowing advantage to that source. That decision raised the estimated subsidy to the extent that GSEs' efficiencies contributed to their funding advantage. Finally, CBO had no empirical means of determining the funding advantage on GSE debt that is nominally short-term but whose maturity is extended through derivatives transactions. Accordingly, CBO assigned the same funding advantage to short-term debt that is "effectively long" as it did to long-term debt. That judgment raised the estimated subsidy compared with the alternative assumption maintained by the GSEs that their funding advantage on such transactions is no greater than on short-term debt.

RESPONSE TO THE GSEs' EARLIER COMMENTS

In preparing its estimates, CBO considered the comments of Fannie Mae, Freddie Mac, and their consultants on CBO's 1996 study. CBO incorporated some of their suggestions into its present analysis—for instance, including a separate measure of the advantage on short-term debt, clarifying that Fannie Mae and Freddie Mac receive only a guarantee fee on mortgage-backed securities (part of which is included in CBO's estimate of their retained subsidy), and treating callable and noncallable

^{3.} Only one year in the sample period contained more than three comparable AA issues by financial institutions.

debt similarly rather than estimating an advantage on callable debt separately. Disagreements remain, however, on several fundamental issues.

The GSEs have expressed disagreement with CBO's concept of cost. At times, they have suggested that because the federal government does not send them a monthly or annual check and because there is no explicit government liability, they receive no subsidy at all. CBO continues to use the common economic meaning of cost, which includes opportunity costs. Other financial firms would be willing to pay for the tax and regulatory benefits conferred by a GSE charter. Furthermore, providing credit guarantees that lower the cost of capital to one entity tends to decrease the supply of credit to competing borrowers, including the federal government. Although CBO did not try to estimate the higher borrowing costs resulting from the reduced credit supply, they impose a cost to the government.

Fannie Mae and Freddie Mac have asserted that CBO's estimates understate the benefits of their operations to consumers. In fact, CBO was not asked to estimate all of the benefits that accrue from the housing GSEs, but rather to estimate the value of the benefits that the GSEs receive from their special status and the benefits that the GSEs pass through to mortgage borrowers. Knowing how much the GSEs get and what they do with the subsidy they receive is relevant for policymakers. The information is useful in evaluating an important and closely related question: could the same benefits be delivered to home buyers even if shareholders received less? Many mechanisms (for example, restrictions on the size of the GSEs' portfolios and charter auctions under which other financial institutions could bid for the same set of benefits or guarantee fees) would reduce the share of the subsidy accruing to shareholders but leave the activities of the GSEs largely unchanged. Although the GSEs have contributed to the efficiency of the mortgage market, future efficiency does not depend on shareholders' receiving dollar-for-dollar compensation for providing benefits to home buyers.

A related issue is whether the GSEs should be credited with "passing through" subsidies that are paid by other lenders. Through market dominance, Fannie Mae and Freddie Mac have reduced rates on all conforming mortgages, not just those that they hold in their portfolios or have securitized. However, Fannie Mae and Freddie Mac do not give up any of their retained subsidy to pay for the benefit of lower rates on mortgages financed by others. That benefit comes at the expense of lower income to non-GSE lenders. Accordingly, no credit should be given for "passing through" a benefit whose cost has been shifted to others. As a practical matter, this issue is less important than in the past because non-GSEs have a shrinking share of the fixed-

rate conforming mortgage market and, hence, provide no new subsidies to mortgage borrowers now.

The amount of the subsidy passed through to borrowers depends on the degree of competition for conforming mortgages. Fannie Mae asserts that intense competition forces the housing GSEs to pass through all subsidies. As evidence, it cites its estimate that, as of December 31, 2000, Fannie Mae and Freddie Mac together held only 22.7 percent of the fixed-rate single-family mortgages outstanding in the United States. However, adjusting for other government mortgage guarantees, GSE-guaranteed mortgage-backed securities, and jumbo mortgages, CBO estimates that Fannie Mae and Freddie Mac have at least a 71 percent share of the market. That share is growing, which suggests that they have significant market power.

Finally, the GSEs contend that liquidity is a major source of their funding advantage. However, CBO attributes the greater liquidity of GSE securities to their implicit guarantee, much as the government guarantee of Treasury securities is the reason for their liquidity. To the extent that the greater liquidity is a result of operating efficiencies, this assumption imparts an upward bias to the subsidy estimate. It seems likely, however, that the sophisticated financial institutions with which the GSEs are compared also manage their debt operations to capture any available gains from enhanced liquidity.